such moments that details like the small white clouds in I 3 of No. 16 (not particularly well seen in the chromolithograph), or the small dark streaks shown in Nos. 3, 13 and 14 can be seen at all. It seems probable that the latter markings are closely related to those described by Secchi, in the *Memorie del nuovo Osservatorio del Collegio Romano*, 1852-1855, p. 114, with this difference, that what he describes as "a great multitude of bright lines on the obscure part beneath the principal band," * we have always seen as a number of fine dark lines on a bright ground.

Similar appearances are mentioned by Mr. Webb † as having been described by Schwabe and Jacob, but nothing of the kind is shown in the well-known magnificent drawings by Mr. De La Rue and Professor Piazzi Smyth.

The great loss of colour sustained by the equatoreal belt within the last two years has been a subject of general remark: its extent will be best seen by comparing the two rough drawings of the opposition of 1872 with the others. The redness of that belt in the autumn of 1870 was such that, according to a naked-eye observation by one of us in September of that year, the general colour of the planet's light was affected by it. This observation was made without a previous knowledge of the fact that *Jupiter's* belts were at all redder than usual.

It is very remarkable that while the southern and equatoreal regions of *Jupiter* during the opposition of 1873 were subject to such great changes, the northern regions, and especially the dark belt 4, remained so long unaltered. There is, however, now an end to this state of things, for, on February 22, 1874, $14^h\ 37^m$ G.M.T. the planet was seen without a trace of the northern temperate belt: the equatoreal belt was fawn coloured as in fig. 7.

* ". . . una gran moltitudine di linee chiare nella parte oscura sotto la fascia principale."

† *Celestial Objects for Common Telescopes*, 2nd edition, p. 127.

On Two Ancient Conjunctions of Mars and Jupiter.

By the Rev. Samuel J. Johnson.

As a supplement to the ancient Conjunctions referred to in the *Monthly Notices* for January, two important ones may be found in Street's *Astronomia Carolina* (1661), which I have not found mentioned by any more recent authors, and they, perhaps, merit further examination. Street gives the results obtained from the tables of his day. He states:

"Anno Christi 498. May the 1st day, near 7^h reduced to London, ♂ was seen so conjoined with ♃, that there was no

interval between them. The true longitude of ☉ was $0^s\ 29°\ 20'\ 6''$. The mean anomaly of ♃ $11^s\ 17°\ 42'\ 32''$, his geocentrick place $4^s\ 18°\ 31'\ 34''$, with lat. north $1°\ 25'\ 30''$. The mean anomaly of ♂ $2^s\ 3°\ 7'\ 47''$, his geocentrick place $4^s\ 18°\ 32'\ 28''$, with lat. north, $1°\ 16'\ 22''$. The difference of longitude is $0'\ 54''$, of lat. $9'\ 8''$, at which small distance to the bare eye they might well seem to have no interval or space between them.

"Anno Christi 1170. September the 13th, at midnight, two of the planets were so conjoined that it appeared as if they had been one and the same star, but they were presently separated. *Gervasii Chronicon.*

"These two planets were ♃ and ♂, being so near together that they seemed as one star, but to some eyes a little distinguished.

"The sidereal longitude of the Sun was by our tables $5^s\ 5°\ 26'\ 31''$. The mean anomaly of ♃ $7^s\ 23°\ 51'\ 50''$, his geocentric place $1^s\ 19°\ 16'\ 3''$, with lat. south $42'\ 44''$. The mean anomaly of ♂ $7^s\ 27°\ 13'\ 49''$, his geocentric place, $1^s\ 19°\ 8'\ 55''$, and lat. south $39'\ 1''$. The difference of longitude is $7'\ 8'$, of lat. $3'\ 43''$, and hence the distance of their centres $8'$."

Upton Helions Rectory, Crediton,
1874, *March* 9.

On the relative Magnitudes of the Fifth and Sixth Stars in the Trapezium of Orion. By Thomas Barneby, Esq.

Having noticed the discussion at the Meeting of the Society held on the 9th of January last, concerning the relative sizes of the 5th and 6th Stars in the Trapezium of Orion, and having felt an interest in the appearance of those Stars, ever since reading in an early edition of Herschel's *Outlines of Astronomy*, that to perceive *both* was one of the severest tests which could be applied to a telescope, I venture to think the scrutiny I have made of them, with my 9-inch object-glass by Cooke, which I have been told is the best he ever made, may be acceptable to the Society.

On first turning this telescope on the Trapezium some years ago, I saw the 5th star distinctly, but I could not detect the 6th for a considerable time, which caused me some disappointment; but when I first perceived it, I found it so easy that I almost fancied I must have been looking in the wrong place for it before. I could then see it easily with a micrometer-eyepiece, which had evident marks of use by its former owner, the late Captain Jacob. I afterwards from time to time saw the 5th and 6th stars without difficulty, for a considerable period, but I always considered the 5th as by far the more easily seen.

For the last two or three seasons however (before the present),